

California Antique Radio Gazette

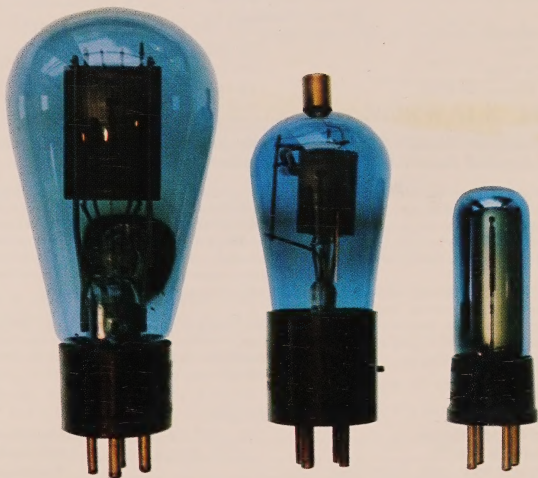
Official Journal, Southern California Antique Radio Society.

VOLUME 16

NOVEMBER 1991

NUMBER 4

ARCTURUS UPDATE



Southern California Antique Radio Society

Incorporated, Non-profit Organization

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SCARS is a non-profit organization. Its purpose is to preserve the history of wireless communication by encouraging the acquisition, preservation and exhibition of antique wireless and radio apparatus and publications pertaining to its history and development.

SCARS promotes social contacts through meetings held four times a year at various locations in Southern California. Featured at these meetings are contests, swap sessions and talks by members and guests on subjects of interest to collectors.

The club publishes quarterly the California Antique Radio Gazette which features news of club activities, hints on restoration, and advertisement of radio related items for sale or trade. It is furnished free to all members. Ads are printed free for members. SCARS assumes no responsibility for the condition of items sold at swap meets or through gazette ads.

Membership is open to anyone having a genuine interest in preserving equipment and history of early wireless and radio equipment. Dues are \$10.00 per calendar year.

ADDRESS INQUIRES TO:

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Submittal of Dues Dan Mason
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The opinions expressed in the Gazette are those of the authors and may not reflect the opinions of the editors or the SCARS membership.



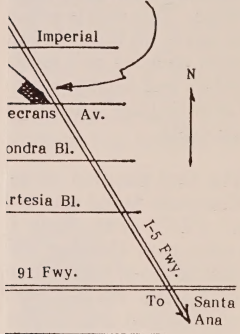
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EXT MEETING

ember 15 & 16, 1991
Saddleback Inn
2500 Firestone
Norwalk, CA

DAN MASON
1325 N. LIMA ST.
BURBANK, CA 91505

12500 Firestone
Just West of I-5 & Rosecrans)
Norwalk, CA
Phone (213)868-0401



NORWALK MEET

Friday

from 10:00 am till 5:00 pm, Buy, sell,
activities.

Saturday

from 10:00 am till 11:00 am, Buy, sell,
activities.

There will be a presentation Friday

and Saturday. At the meeting, a presentation,
and donated items auction will

take place after the buy, sell, trade
activities on Saturday.

NOTE

A sellers' fee of \$3.00 will be
collected at this meet.

Next years dues (\$10.00) can be
paid at this meet or should be
mailed to Murrel Crump A.S.A.P.

Bob Baumbach

has agreed, among other tasks, to
edit all the Classified Ads, so send
your submittals directly to him at
20802 Exhibit Ct., Woodland Hills,
CA 91367.

Southern C

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Santa Monica, CA 90402

Robert Baumbach, Joe Knight
Myers, Floyd Paul, Edward

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**SCARS Annual Meet
Saddleback/Ramada Inn
12500 East Firestone Blvd.
Norwalk, California**

November 15th and 16th

Schedule

Friday, November 15, 1991

- Noon-5:00 PM Registration in the Rio Hondo Room and
Flea Market in the Parking Lot.
6:00 PM Dinner in the Ensenada Room (food
served at 7:00 PM)
7:45 PM Presentation

Saturday, November 16, 1991

- 7:00-11:00 AM Registration and Flea Market
10:30 AM Auction of donated items
11:00 AM Business Meeting in Ensenada Room
11:45 AM Lunch in Ensenada Room
12:45 PM Radio Restoration Forum
2:00 PM Adjourn

NOTES

- ✓ There will be a seller's fee of \$3.00 (covers both days)
- ✓ Parking will be limited this year since part of the property has been converted to a resident hotel. Please help us by using only as much space for your flea market items as you need, and park your car outside of the meet area after you unload.
- ✓ Friday dinner is \$12 and Saturday lunch is \$8 per person. Checks are due by November 8. Mail ASAP to Murrel Crump, 1633 Buena Vista Dr., Palm Springs, CA 92262.
- ✓ Rooms are available at a special SCARS rate of \$45 (two people, one bed). Call (213) 868-0401 to make reservations (deadline November 8).

LAST GAZETTE

Renew now for next years membership. Send \$10.00 for member or \$11.00 for member and spouse to:

**Dan Mason
1325 North Lima
Burbank, CA 91505**

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President's Message

If this is fall, it must be time for our annual two-day extravaganza. We have another great weekend planned this year, so check out the information elsewhere in this issue, and plan to join us at our biggest event of the year. You won't want to miss it!

Speaking of missing; we will be missing the services of three dedicated members after this year. Joe Knight, Pam Davies and Deanna Hames will be leaving their respective rolls as Co-Editor, Secretary and Photographer.

Joe had agreed to remain in the Co-Editor position through this year to assist Bruce Stark during his first year in the Editor's hat. Thanks Joe, for all your help with the Gazette through the years. We have a publication which we can all be proud of.

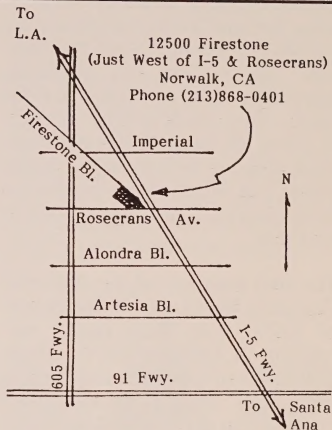
Thanks to you too Pam and Deanna, for your contributions to the club. We all appreciate your efforts.

I am very pleased to announce that Eric Wrobbel has agreed to join the editorial staff. I am looking forward to his contributions beginning with the next issue. Eric has agreed, among other tasks, to edit all the Classified Ads, so send your submittals directly to him at 20802 Exhibit Ct., Woodland Hills, CA 91367.

Bob Baumbach

NEXT MEETING

November 15 & 16, 1991
Saddleback Inn
12500 Firestone
Norwalk, CA



NORWALK MEET

Friday

12:00 Noon till 5:00 pm, Buy, sell, trade activities.

Saturday

7:00 am till 11:00 am, Buy, sell, trade activities.

There will be a presentation Friday evening.

The club meeting, a presentation, and a donated items auction will take place after the buy, sell, trade activities on Saturday.

NOTE

A sellers' fee of \$3.00 will be collected at this meet.

Next years dues (\$10.00) can be paid at this meet or should be mailed to Murrel Crump A.S.A.P.

ARCTURUS UPDATE

by Bill Condon

Back in July of 1980 the author published an article in the SCARS Gazette detailing the development of early Arcturus tubes and listing the various types made. Since that time new information has surfaced allowing a more accurate list to be made. This article will not attempt to cover all the previous development data but will recap the major points and supply some additional information not previously available.

The first mention of the Arcturus Company found was in September of 1927, with their initial ads running in October 1927. Their first series of tubes ran on 15 volts AC with carbon heaters tied internally to their cathodes. Early versions of the AC28 and others had heater screw connections on the bases to simplify the conversion of battery sets to AC (Fig. 1 middle), and Arcturus sold matching wiring harnesses for this purpose. Arcturus did not use the "AC" prefix on the tube numbers in their ads, but the earliest production tubes were so marked on their bases. To avoid confusion with later types the AC prefix will be used here to describe the 15 volt types. The early ads made no mention of blue glass and indeed not all of the original 15 volt series had blue bulbs. The early production of the AC30 and AC40 (both power tubes) had clear tipped bulbs (Fig. 1 right, left). Later versions had blue tipless bulbs. The AC32 (hi-mu type) has been seen with an amber bulb, and other

variations may exist. While this first series was not a huge commercial success, sales were sufficient to continue manufacturing into 1933 as evidenced by their inclusion in the Spring 1933 Federated Purchaser catalog.

An Arcturus data sheet in the author's collection lists all the 15 volt types in order of introduction and contains the following statement: "Arcturus manufactures a complete line of 15 volt A-C Tubes: Nos. 26, 28, 30, 32, 48, 40, 22 and 50." The last mentioned number 50 is of unknown design and no evidence of any actual production has been found to date.

In July of 1928 Arcturus brought out their first standard type, the '27. While some early ads described this tube as the 127AC, the tubes were actually marked 127A. All 127A's had tips and were marked DETECTOR on the base. The A was dropped in late 1928 but the use of tipped bulbs continued for a while on the 127. Before the conversion to ST (dome) bulbs occurred in 1933/34, the size of the 27 was changed from the S14 to the smaller S12. In late 1928 several other standard AC types were introduced, all tipless.

Two nonstandard tubes of 1928 were the 126H and the 171H, heater versions of the 126 and 171. The 126H had an internal construction quite different from a regular 126, which apparently resulted in a lower grid-plate capacitance. Since the 126 was commonly used in RF stages with some form of neutralization, a small capacitor was formed inside the

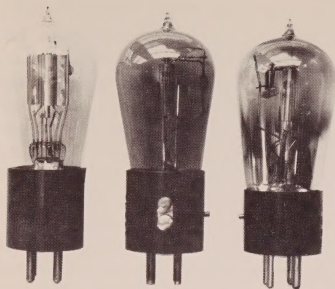


Figure 1

tube using a metal sleeve over a glass rod insulated wire. This capacitor was tied between the grid and plate to adjust the capacity to the nominal value. Note that the 126H was tipped (Fig. 2 left).

One of the first AC tetrodes on the market was introduced by Arcturus in April of 1929, first listed (and marked) as the 122 (Fig. 2 middle). By July of 1929 the number was changed to 124. The early number was an unfortunate choice as somewhat later they made another 122, this one same as the UX222.

During the late 20's and early 30's Arcturus expanded their tube line to include most of the standard types as made by RCA. Their battery line was limited to the 101A, 012A, 122, 099UV and 099UX. The AC tubes used a quick heater construction and they stressed this feature in their ads, claiming a seven second warm-up time.

A number of new types were pioneered by Arcturus, including the PZ of 1931. This was the first power pentode on the market, and was followed by the PZH, an indirectly heated version. Also

brought out in 1931 was the 551, the first variable mu tetrode. In 1932 the GA appeared, a 5 volt power pentode (Fig. 2 right). Intended to replace the 71A in new designs, it never gained wide usage. The best known of the special tubes were the Wunderlich detectors, of which four versions were made. The type A had a 2.5 volt heater and came in 5 and 6 pin varieties. The A Automotive had a 6.3 volt filament and 6 pin base. The seldom seen type B had an extra element called an anode grid. The A and A Automotive were 1932 issues, while the B was released in 1933.

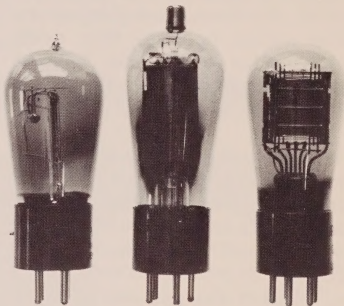


Figure 2

In early 1933 four more special tubes were released. The AD was a half-wave rectifier similar to the 1V but having a fuse in the plate lead. The AE is somewhat of a puzzle. This tube was a power tetrode, but with a plate of special design to minimize secondary emission and operated as a pentode. This is the classic description of a beam power tube and would have made the AE the first such tube on the market, three years ahead of the 6L6. However, the AE seems to have

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JACKSON-BELL and its RECEIVERSHIP DAYS

by Floyd Paul

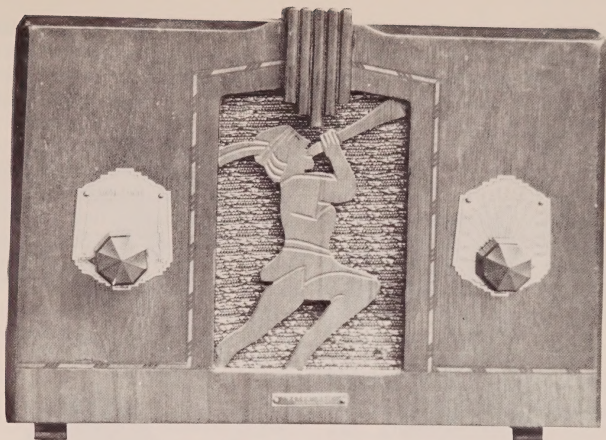
Jackson-Bell (J-B) started business in December of 1926 and ended in December of 1932. During the first few years the company was attempting to find its niche. In 1929 J-B marketed a unique line of tapestry speaker grill-cloth radios. In the spring of 1930 J-B was marketing midgets and by the end of the year they were manufacturing midget chassis for Herbert Horn, Flint, Waltham, and themselves. The author believes they made chassis for other Los Angeles manufacturers during the 1930-1931 era.

1930 through 1932 was a period of phenomenal expansion for the company. J-B established mid-west and eastern seaboard outlets, which was unusual for a Pacific Coast firm. They produced a wide variety of cabinet designs and changed cabinet styles every few months. The company was by far the largest renter of space and made the largest royalty and licensing payments to Gilfillan Bros. A J-B ad in the November 1932 issue of Radio magazine made note of "selling over 20,000 Peter Pans in the past year." Business was good and evidence points to overconfidence and overbuying of parts, materials, and services. By December of 1932 the company was forced into an involuntary receivership. A Los Angeles Times index reference notes: "Dec. 5, 1932-Kenneth

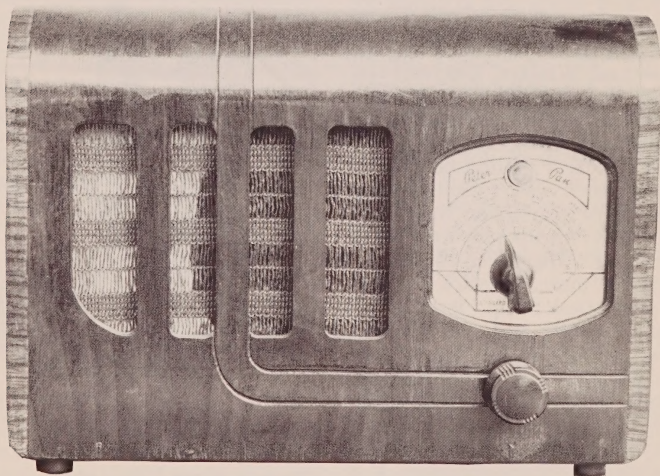
Decker and C.W. Connell have been appointed co-receivers for properties of the Jackson Bell Co., Ltd. The American Steel Package Co. a California concern, which asserted it is an unsecured creditor in the amount of \$24,095.32, filed the petition in equity. Liabilities of the company were placed at \$163,178.32, accounts receivable at \$97,482.06 and value of its machinery and plant was estimated as being at \$95,541.91." The last radio models advertised by J-B in December of 1932 were the 25, 26, 27, 28, and the 205 (automobile radio) series.

What happened to the company during receivership? The reader is referred to the book Los Angeles Radio Manufacturing, the First Twenty Years by this author for some answers. The author believes that Roy Shelley, owner and manager of the Peter Pan Radio Company in Los Angeles, acquired many of the completed chassis of J-B. Shelley may have purchased some rights to J-B designs as well as parts. Rider's "Perpetual Trouble Shooter's Manuals" in Vol VII shows models 25V, 25U, 4, 48 and B listed under the Peter Pan Co. name. Telltale signs of the draftsman's initials, WPK, appeared on more than one schematic diagram. Bill Kennedy (WPK) was the draftsman at J-B for many years and put his initials on many J-B schematic diagrams. These models of the Peter Pan Co. are similar or identical to J-B's models 25V, 4, and 24.

Westone Radio Corp., another Los Angeles radio manufacturer (with a 1932-33 address of 2513 So. La



Peter Pan Radio Company, circa
1933; 57, 58, 2A5, & 80 tubes.
(Phil Barr collection)



Peter Pan Radio Company, circa
1934; 78, 76, 41, & 80 tubes.
(Phil Barr collection)

Continued on page 17

WESTERN ELECTRIC DESK PHONES

by Bruce Stark

The dial telephone was first installed in La Porte, Indiana, in 1892, by the Automatic Electric Company, which was formed to exploit the Almon B. Strowger 1891 patent for an "automatic" switcher. The story is that Mr. Strowger, a Kansas City undertaker, felt that the mandatory operators were purposely harassing him and trying to put him out of business by misdirecting his customers' incoming calls. He developed a telephone, first using push buttons and the associated switching equipment to handle 99 numbers.

The first Western Electric dial phone made was the "candlestick," introduced in 1919. At this time the available switching equipment could only handle a limited number of phones so it wasn't used in large cities until years later. New York City didn't incorporate dial phones until 1922. The phone companies' term for the candlestick was the "Upright Desk Stand." It required a separate bell box and had an absolutely miserable tone quality. This was the toughest phone to locate and is the most valuable. The few times I've seen them for sale they have been priced at \$150.00 and up, in restored condition. It is generally believed that any of these phones are worth more in good unrestored condition. I am appalled when I see an otherwise fine example of a candlestick in polished brass as this is not an original

finish. There have been some reproductions seen in the marketplace complete with a Western Electric name plate and a modern silent dial. These are nice decorator items but today have no historic or investment value and are sometimes sold as "original!" Sometimes you can spot a candlestick in an old movie used with the "Scissor Gate" which I think makes it a wall phone. The candlestick with a dial was the last new development in Bell's invention, seen by him before his death in 1922.



The next new phone was introduced in 1928 and was referred to as the "French phone." This phone has a round base which makes it rather unstable during dialing. This was the first phone to use the combination receiver-transmitter that had been used by phone company linemen since 1878. The tone

quality of this phone is indistinguishable from a modern instrument. I use it daily with no complaints.



In 1930 a modified version of the "French phone" was introduced. This phone has an improved dial mechanism and an oval base. Shortly after it was introduced it was offered in a variety of finishes besides the standard black. The available colors were gray, ivory, gold, statuary bronze and oxidized silver. Both versions of the "French phone" require a separate bell box. This was the last phone development seen by Thomas A. Watson before his death in 1934.



The fourth phone in the collection is the "300" desk set. It was the first phone to incorporate the bell into the base. It was introduced in 1937 and was originally manufactured with a steel base. In the early

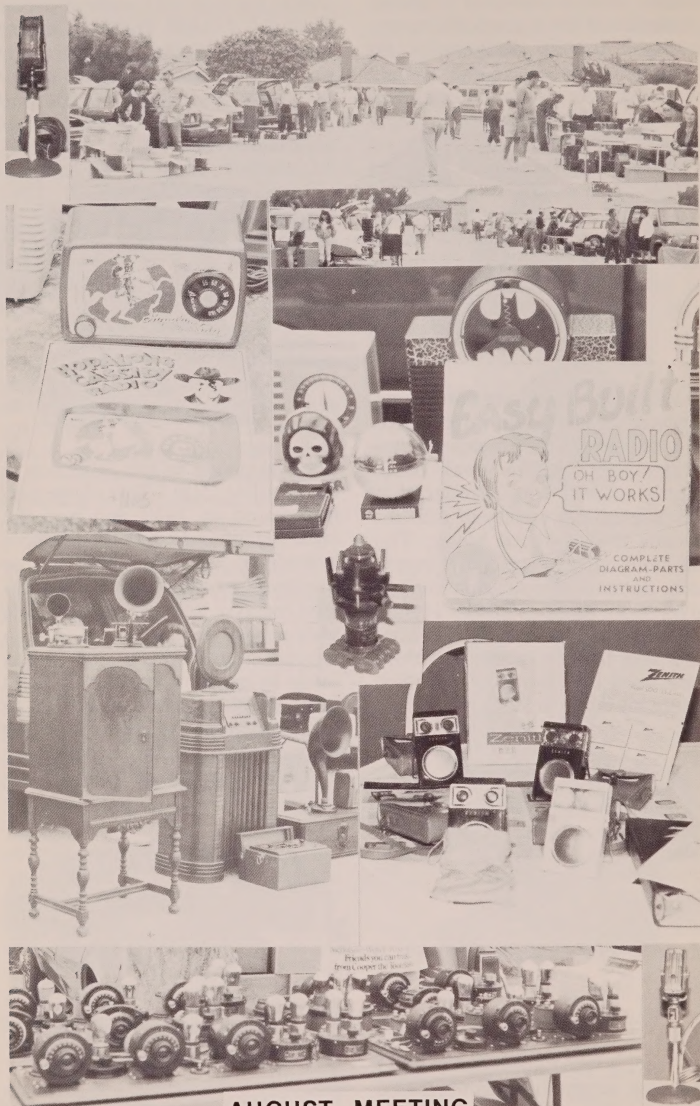
1940's the base was made of plastic because of metal shortages during World War II. Because there was an unprecedented demand for telephone service after the war, this phone was manufactured in large quantities.



The last phone in the collection is the familiar "500." This phone was introduced in 1949 and was the most manufactured of the Western Electric phones. The "500" has an improved handset with a modernized receiver and transmitter. This phone was also supplied with a volume control for the bell. It was made in many colors but I would guess the clear plastic version is the most valuable. I've never seen one for sale but I remember seeing one as a kid in a phone company display at a fair.



Continued on page 17



AUGUST MEETING

STUDIO MICROPHONES

by Bruce Stark

I got a call the other night from George Somes regarding the Van Nuys meet and we got to talking about his speciality, microphones. George told me of another mike collector who lives about three blocks from me. It so happened that the next day this collector would be having the first showing and lecture on his collection which has just taken up permanent residency in a Valencia business complex. The next logical move was to give this collector, Jim Webb, a call.

Jim is a SCARS member and a freelance recording engineer for the film studios where he has had a close relationship with the equipment he collects. He has been seriously building this collection for the last five years and a friend of his has just donated a location to house it. Jim suggested I bring a set of mono headphones so I could listen to the mikes on display.

At first I was excited about seeing something as special as this but upon my arrival, I can best say, I was overwhelmed. All but a few of the mikes are operational and are connected to a manned patch console. There are 12 positions in the audience with their own volume controls for the visitor to plug in his headphones. Jim has a format that he follows and he uses the microphone under discussion while he talks about it. The effect is remarkable and logically it's the most accurate method to demonstrate quality direction and range.

The original objective of the collection was directional mikes but it soon evolved into studio mikes in general.

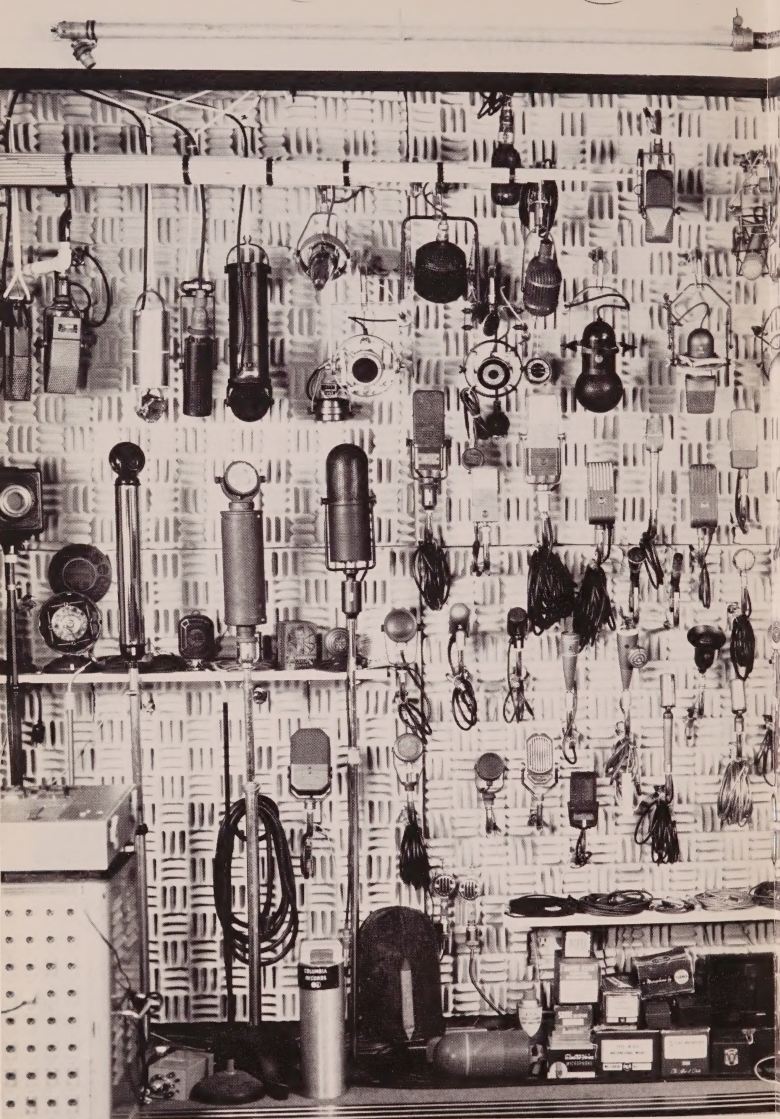
There are about 120 mikes in the collection. Microphone technologies represented are inductor, carbon, crystal, ribbon, condenser, dynamic and sound power. Microphone types include directional, bi-directional, poly-directional and vari-directional. Manufacturers include Altec, RCA, Western Electric, Remler, Turner, Carrier, Electro-voice, Amperite, Neumann, Universal, etc. etc.

The colorful nick-names are a study in themselves such as the "Ice Cream Cone," "8 Ball," "Shotgun," "Skunk," "Salt Shaker," "IKE Mike," and the "Paintbrush."

I learned that LBJ wouldn't tolerate more than one mike in front of him so a special microphone was made that housed two mikes. There is the Perry Como mike that cost \$1500 in 1963. There is the mike that was hidden in Churchills' offices during the war, and the 10 HZ underground mike!

Jim is tentatively planning to show the collection on the last Saturday of every month but it will have to be on an RSVP basis only because of the limited number of headphone stations.

Contact Jim Webb at (818) 769-6738. He has done us a great service in not only the preservation and documentation of all these studio mikes, but also the excellent presentation and his willingness to make it available for SCARS members to experience.





The War Emergency Radio Service in Southern California during World War II

PART I

By Robert E. Grinder, K7AK

Younger SCARS members are likely to identify the call letters KGIC, KGWE, KGCL, KGLV, and KKQL as representing radio broadcast stations west of the Mississippi river. Members who lived in Southern California a half-century ago, however, will recognize these call letters as those of WWII nets of the War Emergency Radio Service (WERS) located, respectively, in Inglewood, Long Beach, Los Angeles county, Los Angeles city, and San Diego.

The wartime issues of QST and The Radio Amateur's Handbook are packed with commentary regarding WERS rules and regulations, WERS operating procedures, and construction of WERS receivers and transmitters. What was their purpose? What was the role of the WERS nets in the war effort? To answer these questions, I focus on the historical role of WERS in both amateur radio and wartime Southern California. Part I describes the origin and the organizational and operating procedures of the War Emergency Radio Service. Part II, which will appear in the next issue of the Gazette, reviews the development and the activities of WERS nets in Southern California. Part II concludes with commentary about the few items of commercial

equipment that were available to WERS operators and which are of interest to contemporary collectors.

The origin of the War Emergency Radio Service

Early 1939 marks a stellar moment in the history of amateur radio. Fifty-one thousand amateurs lived in the United States and 20,000 lived in foreign lands. The commercial receivers of 1939 were exceptionally sensitive and selective; powerful transmitters could be constructed inexpensively. Amateurs routinely worked stations around the world. However, when war came with a vengeance to Europe in September, 1939, privileges in 121 of the 250 countries where amateurs were licensed, including Canada, were suspended immediately. On the basis of its neutrality, the United States allowed amateurs to continue contacting other countries until June, 1940, at which time communications with amateurs elsewhere was prohibited.

During a phase of "positive neutrality," which extended throughout most of 1941, amateurs were recruited by the government for a "Civilian Technical Corps," ostensibly to repair British radar equipment. The armed forces expanded rapidly, which led the Army, in July, 1941, to announce that it was appropriating portions of the 80 meter amateur band. The federal Office of Civil Defense was beginning to take shape, and the American Radio Relay League (ARRL), on behalf of the amateur community, suggested that amateurs become the backbone of civil defense communications.

Problems abounded for amateurs engaged in early civilian defense efforts, not the least of which was harassment. In Los Angeles particularly, for example, perhaps because of the vulnerability of the West Coast to a surprise bombing attack, jittery police hassled amateurs who possessed mobile radio gear. Cars with strange antennas were stopped, and amateurs who were not carrying their station licenses, and sometimes even when they did have them, were hauled into headquarters for questioning.¹

On December 7, 1941, eight hours after the first bomb fell on Pearl Harbor, all non-essential amateur operation was suspended for the duration of the war. ARRL operators were allowed to operate W1AW, the official station of the League, in order to transmit bulletins and to contact amateurs, who were unaware of the FCC proclamation, to tell them to get off the air. On December 8, 1941, in the interest of national defense, the FCC authorized amateurs to operate temporarily self-powered, mobile equipment on the 2 1/2 meter band. Amateurs across the land were allowed to transmit emergency-related messages of, particularly, local, municipal officials. As the General Manager of ARRL stated, "We are the only ones who can help when the wires go dead." He also admonished amateurs to heed the following warning: "Chiseling is definitely discouraged and there must be a bona-fide defense need to be served."²

Self-serving transmissions by insensitive amateurs, nonetheless,

ensued. Thus, on January 10, 1942, the FCC canceled all temporary authorizations, including that of W1AW. A Los Angeles representative of the ARRL expressed subsequently his lament in QST: "I hope that by the time this is in your hands that we are able to demonstrate to the authorities that we are of some real value to the community, rather than a bunch of irresponsible nitwits. It was due in some measure to the flagrant misuse of our privileges by a few that we were all put off the air. Let us all see that it never happens again."³

ARRL officials rushed to Washington, D. C. to mend fences. In the process, they convinced the Office of Civilian Defense to establish a system of communications whereby amateurs could serve their country. Finally, in June, 1942, the FCC announced the creation of the War Emergency Radio Service as an integral unit of community defense. Radio clubs in every municipality attractive to enemy bombers, the FCC declared, should plan immediately to organize WERS nets.

Organization and Operation

The army had parceled the entire United States prior to the war into air-raid warning districts. Each district contained roughly an area of 20 to 25 miles square. A relatively large city, situated conveniently, was designated as district warning center. Via the d.w.c., army defense commanders relayed instructions and information to surrounding communities, which were regarded as subcontrol centers.

The Washington communications office of the OCD stated initially that WERS nets were to be framed by the warning districts. It expected the FCC to grant only one station license, which would probably go to the d.w.c., to a district. Operators were to be identified by numbers following the station designation. For example, Los Angeles county was assigned eventually the call letters, KGCL; individual operators were identified as KGCL-1, KGCL-2, etc. The OCD plan called for more comprehensiveness than the amateur community could handle, so, in practice, station licenses simply were issued to municipalities on behalf of responsible groups of amateurs, whose base was often a well-established club. As a consequence, in large metropolitan areas, like Los Angeles, several nets with different station licenses operated in close proximity.

Amateurs flocked to the WERS nets since they provided operating privileges, camaraderie, and opportunity to be of service to one's community and country. The need for operators was so great, however, that non-amateur civilians were also recruited. The latter qualified to operate a WERS transmitter by passing the test for a third-class radiotelephone license. Aspiring radio broadcast announcers had long been required to pass the same test, which pertained not to radio theory but to FCC regulations. WERS drills thus became the only time in the history of FCC regulations that amateurs were permitted to communicate via radio with individuals holding a different class of license.

WERS operation was authorized on the amateur 2 1/2 meter band (112-116 MHz). Control centers were to operate between 112-114 MHz; local units, including mobile and fixed stations, were restricted to frequencies between 114-116 MHz. All transmitters were limited to 25 watts input. The FCC required that transmitters operating in the 112-114 MHz portion of the band maintain a bandwidth of 0.1 of one percent, and that those operating in the 114-116 MHz region maintain frequency within a bandwidth of 0.3 of one percent.

Since the FCC specified bandwidth rather than deviation tolerances, WERS operators were faced with an insurmountable dilemma. Transmitters sufficiently stable to operate within about 50 kHz of an assigned frequency between 112-114 MHz, or within 150 kHz of an assigned frequency between 114-116 MHz, were largely unavailable. Parts to build crystal-controlled transmitters were rare indeed; a few master-oscillator, power-amplifier (MOPA) transmitters were around, but these were none too stable. Most WERS operators constructed two-tube transceivers, whereby one tube served as oscillator during transmit and as superregenerative detector during receive; the other tube, depending on mode of use, functioned as either modulator or audio amplifier.

Two noteworthy characteristics of these simple transceivers are particularly troublesome. First, operators are often required to tune away from their transmit frequencies to listen to other stations; hence, resetting the dial to one's

transmit frequency is a major, sometimes daunting challenge. Second, two or more transceivers in communication with one another, as a product of constant retuning, tend to "walk" together across the band, inadvertently interfering with band activity in their path.

The technical editor of QST stated, in 1942, "A strict interpretation of this rule would effectively hamstring WERS operation before it ever got a chance to get started."⁴ Fortunately, WERS operators, given the circumstances, proved to be pragmatists. They interpreted the FCC bandwidth requirements to be ideal rather than practical standards, and they simply made the best possible use of the gear available to them--nothing more, nothing less! The FCC acquiesced apparently, for no WERS operator was cited for a frequency or bandwidth violation.

References

¹Click, R. S. (December, 1941). Southwestern Division note. QST, 25, p. 85.

²Warner, K. B. (January, 1942). War comes! QST, 26, p. 1 of insert.

³Click, R. S. (March, 1942). Southwestern Division note. QST, 26, p. 77.

⁴Grammer, G. (August, 1942). Technical aspects of the WERS regulations. QST, 26, 25-28, p. 28.



Psalm 23 REV. A

by Paul Thompson

Radio collecting is my hobby.
I shall forever want.
At flea markets it gives me no rest.
To garage sales it leads me.
It destroys my resolve.

It guides me down devious paths.
Even as I walk into the dark corners
of antique shops, I have no fear, for
it is behind me with it's rod and
staff prodding me to overspend.

At swapmeets it spreads the tables
before me with catalins and bread-
boards.

It fills my head with fantasies of
inflated disposable income.

My wallet seems to overflow.

Only poverty and avarice shall
follow me all the days of my life.
And I shall dwell in the poorhouse
for years to come.

VAN NUYS MINI-MEET

At 5:15 A.M. there were already
six cars in the church parking lot
with items being assembled on the
ground in anticipation of buyers.
Forty-seven sellers eventually filled
the lot, and judging from the steady
stream of items being carried
between cars, I would guess a lot of
sales were made. About 9:15 A.M.
the hot truck showed up with
everything from breakfast burritos
to bagels and cream cheese. It was
well received. The meet ended at
11:00 A.M., when the B-B-Q lunch
was served to forty-three gourmets.
After the lunch the show and tell
started with a microphone presen-
tation by George Somes and Jim
Webb, and ended with a de Forest
Audion discussion by Bruce Stark.

From page 3

had no documented usage, and is not shown in any general tube listing the author has seen. There is then some question as to whether the AE was ever actually in production. The types AF and AG were the same as the 82 and 83 but with protective fuses in the plate leads. In an Arcturus technical bulletin of May 1934 the AD and AE were not listed, and the AF and AG were shown only as reference designations to the 82 and 83.

One other 1933 release of note was the 39/44 (Fig. 3 left). This tube replaced the earlier types 139A and 44, which had similar characteristics. The interesting feature of this tube is that some were made with blue bakelite bases, the only Arcturus tube known to use that construction.

Arcturus made a number of tubes for other companies, only some of which carried their name. Best known are the Sonora/Arcturus types which had special numbers but were equivalent to other Arcturus tubes. Also seen are the Crosley/Arcturus series, all standard numbers. Less common is the 486/686 made for Sparton (Fig. 3 middle). This tube was a 3 volt battery triode which used a 5 pin base with an unused pin. Blue bulbs were used but the Arcturus name is not present. Some tubes were also made for Sears under the WLS logo. The WLS 4631 shown is a 127, tipped but using clear glass (Fig. 3 right).

The three digit number system was dropped before the use of blue glass stopped and almost all of the 100 series numbers can be found as two digit numbers. In some cases four different number variations were used. As an example the 137 became the 137A, was shortened to 37A and finally ended as the 37.

The following is a listing of all Arcturus tubes known to have been initially made with blue bulbs. The cut-off date is mid 1933 at which time the word "Blue" was dropped from Arcturus ads. Since the use of blue glass was gradually phased out,

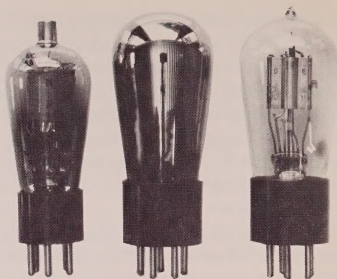


Figure 3

later types may have been made with blue bulbs in small quantities.

ARCTURUE BLUE GLASS TUBES

AC22	15 volt	- rf tetrode
AC26	" "	- detector
AC28	" "	- gen purpose
AC30	" "	- power
AC32	" "	- hi mu
AC40	" "	- power
AC48	" "	- gen purpose

101A, 110, 012A,	
122 early	- same as UY224
122 late	- same as UX222

124, 126,	
✓ 126H	- indirect heater
✓ 127A, 127, 130, 131,	
132, 133, 134,	
136	dc heater
137	" "
138	" "
136A	ac/dc heater
137A	" "
138A	" "
139A	" "
39/44	
41, 42, 44, 145, 46, 150,	
551, 55, 56, 57, 58, 59,	
071	- .5 amp oxide fil
071A	
071H	- indirect heater
180, 181, 82, 83,	
84, 85, 89,	
099 (UV)	
099 (UX)	

AD, AE, AF, AG, GA, PZ,	
PZH	- indirect heater
Wund A	- 5 pin
Wund A	- 6 pin
Wund A Auto	
Wund B	

DE-1	Sonora	- same as 127
RA-1	"	- same as AC48
RE-1	"	- same as 180
RE-2	"	- same as 181
SO-1	"	- same as AC40
SO-2	"	- same as 150

486/686 Sparton - special

From page 5

Salle Ave. and a 1934-35 address of 5914 S. Western), has a schematic diagram in Rider's Vol VIII that is labeled model 84 and it is identical to the J-B model 84 schematic. The Westone model 84 schematic has the original Peter Pan logo, the initials of WPK, and the date of 6-20-31 on the schematic (same date as the J-B model 84 schematic).

The exact details of the disposition of the J-B assets are made more puzzling by the entry in a Sylvania Tube Complement Book, of 1937, identifying the Pacific Radio Company of Los Angeles as the J-B successor and listing some one dozen sets under the Jackson-Bell trade name.

A Radio Doings magazine listing entitled "Radio Sets and the Los Angeles Distributors" of October 14, 1935, has the following names in one grouping: Westone, Pacific Radio Co., 1479 W. Adams St., Los Angeles. The address of Peter Pan Co. was 1487 W. Adams and that of Remington Radio & Tel. Co. was 1477 W. Adams. (The author believes Roy Shelley could have owned all of the above companies by late 1935.)

A summary of the above information would suggest that one

or more of these companies purchased the J-B assets, including completed chassis, work in process, parts, materials, logos, cabinets, name, and good will of Jackson-Bell during December of 1932 and the early part of 1933.

From page 7

There are versions of the aforementioned phones that I've chosen not to recognize in the collection. There are business phones with push buttons for interoffice extensions. There is a "3500" set that was a "500" with the "300" handset. There is the "Princess" phone with its illuminated dial and night-light. It was intended for a lady's bedside and wasn't even offered in black. Any of the phones in the collection could have been supplied with a metal plate installed in the place of the dial and used as an extension phone.

I have found a good source for telephone parts, to help in restorations, that I will here share with you: "Phoneco, Inc." P.O. Box 70 Galesville, Wisconsin 54630 (608) 582-4124.

I read an interesting newspaper article recently which was titled, "Old-fashioned phones foil dope dealers." It seems the folks of Springfield, Fla. persuaded Southern Bell to replace push button pay phones with dial types. The local drug dealers use beepers to make buys and receive orders. Apparently the beepers will only work with a push button phone. A technological step backwards solves the problem.

NORTHERN CALIFORNIA REPORT

by Mike Adams

How long have I been listed in the Gazette as your Northern California representative? Three years? Have you wondered when I'm going to start "representing?" Well, it takes a while to get adjusted, but in the years since I left the Southland and the presidency of your club, I've gradually become a part of the local collecting and historical community. I got involved with CHRS, the California Historical Radio Society, as vice-president, and I'm on the board of the Perham Foundation of the Foothill Electronics Museum. As your representative, I'll share with you the latest news about these two fine organizations:

CHRS: Like SCARS, is a growing group with the same goals, same basic activities, even many of the same people. Quarterly flea markets have been held at Foothill College for many years, although there is a chance that this sight may disappear along with the electronics museum. Besides events for members, our group recently presented two public exhibits of radio history, one at the Fremont Library, and the other for "Living History Days" at the San Jose Historical Museum. I can also tell you that the people of CHARS would very much like to have a joint CHRS-SCARS meet in the future. We already have a meet in June in San Louis Obispo, and this might be a good venue for a combination meet in 1992. Talk to us.

PERHAM FOUNDATION: By the time you read this, the Foothill Electronics Museum will be a "Museum-in-a-Box." We had to vacate the museum building by September 15, and we are searching for a permanent home. A giant moving-out auction at the museum was held after the CHRS meet in August. Literally tons of stuff, from the very collectible to real junk, went at very fair prices. I served as the auctioneer, along with CHRS president Paul Bourbin and Perham attorney Bart Lee.

Foothill has for years been the focal point of practically all radio activity in the Bay Area. Conveniently located between San Jose and San Francisco, it is where the ham clubs had their headquarters, equipment, training and where all the historical activity happened. The college is only a few miles from Stanford University and the famous "garages" where de Forest perfected the triode tube and the Varian brothers invented the Klystron. The location will be missed. A decade of constant harassment by unenlightened Foothill administrators will not.

So you can see that the Bay Area historical and collecting communities are in transition. For 1992, new locations must be found for many of these activities. It looks like a long period of struggle and readjustment.

MINUTES OF LAST MEETING

Once again the meeting was held in Torrance starting before sun-up with a good attendance by both sellers and buyers.

After a break for lunch, the business meeting was called to order by President Bob Baumbach at 12:15 P.M.

Bob commenced with a few announcements, including reminding everyone of the mini-meet to be held in Van Nuys and the next big two day meet in Norwalk.

Richard Gray announced the winners in the three category contest he organized. Our thanks to Richard for a job well done.

Following the contest, Delton Lee Johnson and Paul Thompson presented a program on collecting radio and related literature. Lee Johnson discussed books and Paul Thompson continued the program with magazines. Our thanks to Lee and Paul for a very interesting and entertaining program.

The meeting was adjourned at 1:30 P.M.

Pam Davies Secretary

Name that radio contest.



Must be an east coast station.

